

**BY ORDER OF THE COMMANDER  
AIR FORCE RESEARCH LABORATORY**

**AIR FORCE RESEARCH LABORATORY  
INSTRUCTION 61-101**



**26 FEBRUARY 2015**

***Scientific/Research and Development***

***SMALL BUSINESS INNOVATION  
RESEARCH (SBIR) AND SMALL BUSINESS  
TECHNOLOGY TRANSFER (STTR)  
PROGRAMS***

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This instruction implements Public Law 106-554, *Small business Innovation Research Program Reauthorization Act of 2000*, Public Law 107-50, *Small Business Technology Transfer (STTR) Program Reauthorization Act of 2001*, Small Business Administration (SBA) Policy Directive (PD) 65-01, and Small Business Innovation Research (SBIR) Programs. This instruction establishes procedures for the SBIR and programs. The Air Force (AF) uses STTR to focus on basic research while SBIR focuses on applied research and advanced technology development. This instruction applies to all Air Force Research Laboratory (AFRL) personnel. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) AFMAN 33-363, *Management of Records*, and disposed of IAW the Air Force Records Disposition Schedule (RDS) located in the Air Force Records Information Management System (AFRIMS). Refer recommended changes and questions about this publication to the office of primary responsibility (OPR), using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847 through the appropriate functional chain of command.

**SUMMARY OF CHANGES**

Changes are administrative in nature and do not reflect policy change. AFRL Form 49, *AF Small Business Technology Transfer (STTR) Program Technical Evaluation Sheet* has been rescinded. Changed page 2 of Attachment 2, *AFRL SBIR/STTR Phase I & II Technical Evaluation*

Worksheet, to Attachment 3, *AFRL SBIR/STTR Debriefing Worksheet Small Business Innovation Research Program*.

## **1. AFRL Responsibilities.**

1.1. AFRL is the AF OPR for the SBIR/STTR programs. The AFRL Commander (AFRL/CC) Technology Executive Officer (TEO) is assigned program management responsibility.

1.2. The authority to enter into SBIR/STTR Phase I or Phase II contracts is delegated to the TEO in accordance with Air Force Material Command (AFMC) PD 61-1, *Small Business Innovation Research (SBIR) Program And Small Business Technology Transfer (STTR) Program*. This authority may be re-delegated to the contracting officers of the AFRL technology directorates (TD) or AFMC Technical Activities.

1.3. TEO. The TEO appoints an AF SBIR/STTR program manager (PM) who is the single point of contact (POC) for the AF program.

1.4. The AF SBIR/STTR PM. The AF SBIR/STTR PM responsibilities will include:

1.4.1. Presenting the AF SBIR/STTR program:

1.4.1.1. To the director, small and disadvantaged business utilization office (SADBU).

1.4.1.2. To the SBA.

1.4.1.3. When interacting with other Department of Defense (DoD) and federal agencies.

1.4.1.4. When conducting program outreach to small businesses.

1.4.2. Managing the AF SBIR/STTR program:

1.4.2.1. Providing information and reports to the Office of the Secretary of Defense (OSD), the general accounting office, and the SADBU as required.

1.4.2.2. Maintaining the AF SBIR/STTR program desk guide.

1.4.2.3. Maintaining the AF SBIR/STTR program information for the SBIR/STTR web site.

1.4.2.4. Leading the AF SBIR/STTR program management team in support of current SBIR/STTR legislative goals.

1.4.2.5. Managing the AF SBIR manager's team (membership consists of the SBIR/STTR PMs and contracting officers from all the centers and AFRL TDs and support from AFRL contracting, legal, and public affairs).

1.4.2.6. Developing a process for identifying success stories.

1.4.2.7. Managing and directing automation for all database and information technology that supports SBIR/STTR

1.4.2.8. Managing the AF SBIR/STTR shopping mall web site <http://www.sbirsttrmall.com/Portal.aspx>.

1.4.3. Managing the SBIR/STTR program execution by the AFRL TDs or AFMC Technical Activities.

1.4.3.1. Establishing the allocation of SBIR/STTR topics to the product centers, the AFRL TDs, or AFMC Technical Activities.

1.4.3.2. Issuing the annual call for topics and manages the topic generation process.

1.4.3.3. Assuring all SBIR/STTR topics receive the AF administrative review prior to the Deputy Director of Defense Research & Engineering (DDDR&E) technical review.

1.4.3.4. Ensuring information in the SBIR/STTR database is complete, accurate, and current.

1.4.3.5. Overseeing the SBIR Phase II Enhancement process.

1.4.3.6. Promoting the DoD SBIR/STTR initiatives.

1.4.4. Managing the AF SBIR/STTR program budget:

1.4.4.1. Establishing the SBIR/STTR program authority and budget authority for the AFRL TDs or AFMC technical activities.

1.4.4.2. Reviewing and ensures all SBIR/STTR funding is executed properly by the AFRL TDs or AFMC Technical Activities.

1.4.4.3. Managing and executes the SBIR/STTR administrative budget.

**2. Commander or Director Responsibilities.** Commanders or directors of all AFRL TDs or AFMC Technical Activities will:

2.1. Ensure that the AFRL TDs or AFMC Technical Activities have assigned a SBIR/STTR PM as a primary duty.

2.2. Ensure their program offices are participating in the SBIR/STTR programs by the generation of allocated SBIR/STTR topics, and have identified SBIR/STTR topic POCs.

2.3. Ensure the appropriate acquisition activities occur to transition and insert SBIR/STTR developed technologies.

2.4. Establish local instructions, processes, and procedures as appropriate.

**3. Local SBIR/STTR PM Responsibilities.** Each AFRL TD or AFMC Technical Activity assigned PM will:

3.1. Represent the AFRL TD or AFMC Technical Activity as a member of the AF SBIR/STTR manager's team, participate fully in all their activities, and interface with the AF SBIR/STTR program management team.

3.2. Provide assistance to all the SBIR/STTR technical POCs as they carry out their duties.

3.3. Provide assistance to individual small businesses as necessary.

3.4. Manage their local SBIR/STTR process in an effort to streamline and reduce the administrative burden on small businesses and participating organizations.

3.5. Ensure all their organizations' allocated topics meet the DDDR&E review criteria and receive local approval prior to submitting them for DDDR&E review. Local review includes technical editors' reviews, Defense Technical Information Center (DTIC) searches, public affairs and Operations Security (OPSEC) review for releasability and it constitutes the final review on behalf of the AF. Work with the topic authors and technical POCs to resolve any differences that occur during the review process. Ensure that all topics are uploaded and finalized in the Topic Submission Module. Whenever feasible, topics withdrawn for any reason are annotated as "cancelled" in the SBIR Interactive Topic Information System (SITIS) before the solicitation closes.

3.6. Ensure all SBIR/STTR proposals are formally tracked to establish the date and time of receipt, and those received after the solicitation closing date and time are returned to the submitter. All proposals and their evaluations must use the AF electronic proposal submittal and evaluation web site. Ensure all published topic proposals are evaluated in accordance with the AF and SBA criteria and outlined in the worksheets in Attachments 2 and 3 for SBIR.

3.7. Submit purchase request packages for Phase I award selectees to their contracting officers within two months of the close of the solicitation.

3.8. Submit purchase request packages for Phase II awards to their contracting officers within three months of the date the Phase II proposal is submitted. The only exception will be if the small business submitter is clearly the cause of the delay. This is contingent upon the appropriate program and budget authorities being in place.

3.9. Ensure that all Phase II Enhancement applications are complete and have been reviewed and approved prior to submittal of the purchase request to their contracting officers.

3.10. Promote the DoD Fast Track participation by small businesses and support other DoD SBIR/STTR initiatives. For further guidance visit web site <http://www.dodsbir.net/solicitation/pdf/fasttrackguide.pdf>.

3.11. Assist the AF SBIR program management team in their SBIR/STTR outreach activities. Support all efforts to commercialize the results of SBIR/STTR research and development (R&D) and encourage the small businesses to actively market their technologies. Encourage small businesses to seek outside non-SBIR/STTR funding of their work when appropriate.

3.12. Enter information into the AF SBIR/STTR database and ensure data is complete, accurate, and current.

3.13. Maintain management files on all local SBIR/STTR activities. Compile and submit performance measure information to the AF SBIR/STTR program management team for the annual AF report to OSD SADB and SBA and other reports as necessary.

3.14. Manage and account for all SBIR/STTR funds (both program and administrative) allocated to them by the AF SBIR program management team.

3.15. Ensure final reports are submitted to the DTIC in a timely manner.

3.16. Identify and submit success stories. Help the small businesses submit summary reports for inclusion in the SBIR/STTR shopping mall.

#### **4. Technical POC Responsibilities.**

4.1. The technical POCs are responsible for generating topic write-ups, where required, the final wording of the topics, rewriting the topics as necessary to meet all review criteria, leading technical team during the review of the proposals, and supporting the contracting officer in the technical aspects of the contract awards during all the SBIR/STTR phases.

4.2. The technical POCs will make themselves available to assist and discuss their topics with the small businesses as appropriate. This includes the pre-solicitation period as well as after contracts are awarded.

4.3. The technical POCs will maintain a dialogue with their counterparts in the program executive office (PEO) and designated acquisition commander (DAC) program offices that generated and support their SBIR topics.

4.4. The technical POCs will work closely with the local SBIR/STTR PM and contracting officer during the completion of work by the small business. It is their responsibility to keep the local SBIR/STTR PM apprised of any significant events or changes throughout the SBIR/STTR project.

4.5. In cooperation with the local SBIR/STTR PM and the contracting officer, determine if the Phase I award winner should be invited to submit a Phase II proposal.

4.6. Maintain SBIR/STTR project files as appropriate.

4.7. Work closely with the appropriate product, test, and logistics centers to transition the SBIR technology.

#### **5. Contracting Officer's Responsibilities.**

5.1. The contracting officer is the only individual with the authority to legally bind the government in a contract. The contracting officer will serve as a business advisor through the entire process and is responsible for the negotiation and award of the contract. The local contracting officer will take action to award contracts in an expeditious manner. In addition, only the contracting officer may direct any changes during contract performance.

#### **6. SBIR/STTR Awards – Three-Phase Programs.**

6.1. Phase I will determine the scientific, technical, and commercial merit and feasibility of proposed concepts, submitted in response to the AF SBIR/STTR solicitation.

6.2. Phase II is the principal research, or R&D effort intended to result in a well-defined, often deliverable, prototype, material, device, process, or service. SBIR Phase IIs may be eligible for a Phase II Enhancement at the discretion of the local SBIR/STTR PM, the technical POC, and the contracting officer. Only the technical POCs can identify those existing SBIR Phase II projects that qualify for the Phase II Enhancement award in accordance with the latest guidance from the AF SBIR/STTR PMs team. All Phase II Enhancements require non-SBIR matching money.

6.3. In accordance with the public law and the SBA PD, Phase III efforts are not part of the formal SBIR/STTR programs. Phase III is defined as any contracted action (military or civilian) that succeeds the formal Phase II work effort.

#### **7. Program Milestones.**

7.1. Call for Topics. The AF SBIR/STTR program management team will issue a formal call for topics approximately one year prior to the formal solicitation. Topics will be allocated to the AFRL TDs or AFMC Technical Activities and to the product centers in accordance with the latest guidance from the AF SBIR/STTR program management team. Either the local TD chief scientist or the equivalent in the local AFMC Technical Activity must approve all topics (dependent upon who will manage the contract when awarded) in accordance with the formats established by the AF SBIR/STTR program management team.

7.2. Topic Review. All topics will be reviewed and approved at the local level prior the DDR&E review board which precedes the formal DoD publication of the solicitation.

7.3. Phase I Proposals. Small businesses responding to any topic in the solicitation will do so according to the format and deadlines prescribed in the solicitation. The technical evaluation and selection of award winners will be by the appropriate AFRL TD or AFMC Technical Activity.

7.4. Phase I Contract Awards. The local contracting officer will initiate all contracting actions leading to SBIR/STTR awards.

7.5. Phase II Proposals. A Phase II proposal can be submitted only by a Phase I award winner and only upon invitation by the AF. For Phase I awards that qualify for DoD Fast Track, Phase II proposals will be evaluated in accordance with the existing DoD guidance.

7.6. Phase II Contract Awards. The Phase II contracts normally will be managed by the same organization that managed the Phase I contract. If there is a change in technology focus, another DoD office may pick up the Phase II effort.

7.7. SBIR Phase II Enhancement Program. Only SBIR Phase II contracts during their last year of execution may be considered for Phase II Enhancement. A Phase II Enhancement is an extension of an existing Phase II contract for up to one year and requires non-SBIR matching money.

7.8. Phase III. Successful Phase II efforts are expected to continue on to commercialization in the military and civilian markets. Phase III is the responsibility of the small business and the AF acquisition organization using non-SBIR/STTR funding.

## **8. SBIR/STTR Program Budget.**

8.1. The annual AF SBIR/STTR budget is set by Secretary of Air Force Deputy Assistant Secretary for Acquisition (SAF/AQX) based upon the AF extramural R&D budget, and determined by the applicable percentage set aside determined in public law. Once the appropriate program authority (PA) and budget authority (BA) are established by SAF/AQX, the AF SBIR/STTR program management team is responsible for allocating all program funds for the local execution of the SBIR and STTR program to the AFRL TDs or AFMC Technical Activities.

**9. Reports.**

9.1. AF activities provide information and data in accordance with the AF SBIR/STTR program management team on the progress of their local SBIR and STTR program. The AF uses this information to report to the OSD, the government accounting office, SBA, and others as necessary.

THOMAS J. MASIELLO, Major General, USAF  
Commander

## Attachment 1

### GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

#### *References*

SBA Policy Directive 65-01, *Small Business Innovation Research Program*,  
Public Law 97-219, *Small Business Innovation Development (SBID) Act of 1982*, 22 July 1982  
Public Law 99-443, *SBIR Continuing Resolution Authority*, 6 October 1986  
Public Law 102-564, *Small Business Technology Transfer Act of 1972*, 3 October 1992  
Public Law 106-554, *Small Business Innovation Research Program Reauthorization Act of 2000*,  
21 December 2000  
Public Law 107-50, *Small Business Technology Transfer Program Reauthorization Act of 2001*,  
15 October 2001  
AFMC PD 61-1, *Small Business Innovation Research (SBIR) Program*, 22 September 2003  
AFMCI 61-101, *Small Business Innovation Research (SBIR) Program*, 14 July 2000

#### *Prescribed Forms*

None

#### *Adopted Forms*

AF Form 847, *Recommendation for Change of Publication*, 22 September, 2009

#### *Terms*

**Air Force SBIR/STTR Program Management Team**— The Air Force office (the Air Force SBIR/STTR PM and staff) responsible for implementing this policy directive and its instructions.

**Air Force SBIR/STTR Manager's Team**— This is a working level group whose membership includes all Air Force TD and AFMC Technical Activities' SBIR/STTR program managers and focal points, the Air Force Program Management Team, and various support personnel (including but not limited to, legal, public affairs, financial management, contracting, etc.). The group meets regularly and works together to resolve common problems, share best practices and lessons learned, and initiate program and process improvements.

**Commercialization**— The process of developing markets and producing and delivering products for sale (whether by the originating party or by others); as used here, commercialization includes both government and commercial markets.

**DoD Fast Track**— Fast Track provides a higher chance of SBIR/STTR award, and continuous funding, to small companies that can attract outside investors. For the investors, Fast Track offers an opportunity to obtain a match of between \$1 and \$4 in DoD SBIR/STTR funds for every \$1 the investor puts in.

**AFMC Technical Activities This refers to all non**—AFRL organizations that participate in the AF SBIR and STTR program. For example, it includes the product, test, and logistics centers.



**AFRL Technical Directorates** In this document, the term AFRL TDs will include the Air Force Office of Scientific Research (AFOSR) as well as the nine AFRL TDs.

**Technical Point of Contact** The technical individual from the AFRL TD or AFMC Technical Activity who will monitor the SBIR/STTR contract technical activity and manage the Air Force technical portion of the project.

## Attachment 2

## AFRL SBIR/STTR PHASE I &amp; II TECHNICAL EVALUATION WORKSHEET

Figure A2.1. AFRL SBIR/STTR Phase I &amp; II Technical Evaluation Worksheet

AFRL SBIR/STTR PHASE I & II Technical Evaluation Worksheet							
Company Name + City & State			Topic Number		Control Number		
			Phase				
Title of Proposal			Basic Cost Proposal Option Cost (If Applicable) Proposed Cost Duration		\$ \$ \$		
Evaluator Name and Signature			AFRL Office Symbol		Phone (Use area code)		
Eval. Date							
<b>Relevant to Choose Topic</b> (If relevant, complete evaluation; if not, indicate Reason in remarks block and return to focal point.)			<input type="checkbox"/> A – Technically Satisfactory <input type="checkbox"/> B – Technically Unsatisfactory				
<b>Evaluation Criteria Scoring</b> – Scores up to those indicated are permissible. (Note: Criteria b and c are weighted differently for Phase I and II.)			<b>LE Proposal Ranking</b> _____ of _____				
Phase I Criteria	Criterion a	Criterion b	Criterion c	Phase II Criteria	Criterion a	Criterion b	Criterion c
Excellent	50	30	20	Excellent	50	20	30
Very Good	45	27	18	Very Good	45	18	27
Average	40	24	16	Average	40	16	24
Poor	35	21	14	Poor	35	14	21
Unsatisfactory	30	18	12	Unsatisfactory	30	12	18
<b>Evaluation Criteria</b> (from Section 4 of the solicitation)				<b>Score</b>			
a. The soundness, technical merit, and innovation of the proposed approach and its incremental progress toward topic or subtopic solution.				<b>Up to 50 points (Ph I and II)</b>			
b. The qualifications of the proposed principal/key investigators, supporting staff, and consultants. Qualifications include not only the ability to perform the research and development but also the ability to commercialize the results.				<b>Ph I up to 30 points Ph II up to 20 points</b>			
c. The potential for commercial (Government or private sector) application and the benefits expected to accrue from this commercialization <u>as assessed utilizing the criteria in Section 4.4.</u>				<b>Ph I up to 20 points Ph II up to 30 points</b>			
<b>Maximum Score – 100</b>				<b>Total</b>			
Remarks							
Rationale for Selection/Non-Non Selection for Funding							

PREVIOUS EDITIONS ARE OBSOLETE

## Attachment 3

**AFRL SBIR/STTR DEBRIEFING WORKSHEET SMALL BUSINESS INNOVATION  
RESEARCH PROGRAM****Figure A3.1. AFRL SBIR/STTR Debriefing Worksheet Small Business Innovation  
Research Program**

<b>AFRL SBIR/STTR Debriefing Worksheet Small Business Innovation Research Program</b>
Topic Number:
Company:
Proposal Title:
<b>Evaluation Criteria</b> (Evaluation criteria are found in Section 4 of solicitation.)
<b>Criterion a: The soundness, technical merit, and innovation of the proposed approach and its incremental progress toward topic or subtopic solution.</b>
Strengths:
Weaknesses:
<b>Criterion b: The qualifications of the proposed principal/key investigators, supporting staff, and consultants. Qualifications include not only the ability to perform the research and development but also the ability to commercialize the results.</b>
Strengths:
Weaknesses:
<b>Criterion c: The potential for commercial (Government of private sector) application and the benefits expected to accrue from this commercialization as assessed utilizing the criteria in Section 4.4.</b>
Strengths:
Weaknesses:
Debriefing Summary:
PREVIOUS EDITIONS ARE OBSOLETE